#### II. CREATING A SCHOOL-TO-WORK SYSTEM INFRASTRUCTURE

The STWOA calls for partnerships at the state and local levels to lead the development of STW systems. These collaborations are expected to coordinate the efforts of educators, the private sector and labor unions, and parents, students, and community groups. Through state and local policies and practices, partnerships are intended to promote new institutional relationships that can, in turn, help improve student learning--both at school and at employer workplaces.

The local partnerships and state agencies involved in these collaborations form an infrastructure for STW implementation. The success and significance of STW implementation may depend on the features and functions of this infrastructure and the extent to which it can persist beyond the period of federal funding. The evaluation has reached three main findings on these issues:

### KEY FINDINGS ON THE STW INFRASTRUCTURE

- States have played supportive, rather than prescriptive, roles in stimulating STW
  development. Interagency committees and administrative teams at the state level
  provided initial leadership and continue to offer assistance to local partnerships.
  Local educators, however, sometimes perceive STW reforms as conflicting with the
  pressures posed by state policies promoting school accountability for academic
  performance.
- Local partnerships are widespread, diverse, and increasing in number. Partnerships cover about 80 percent of school districts in grantee states. Modest funding levels encourage partnerships to play capacity-building roles, with educators generally leading these efforts. Employers are increasingly involved, but college participation (beyond membership on governing boards) remains limited.
- State STW teams, and at least some local partnerships, will likely be sustained in the short run beyond STWOA funding. States appear committed to some level of ongoing STW oversight. Survival of local partnerships and their functions is most assured when they are built on preexisting, funded collaborations such as Tech-Prep consortia, which provided the foundation for about a quarter of all STW partnerships.

This chapter examines three questions about this infrastructure of collaboration at the state and local level:

- How have states organized their efforts and defined their roles in promoting STW implementation?
- What are the important features of local STW partnerships, and what roles do they play?
- How durable is the infrastructure of STW partnerships likely to be after STWOA funding ends?

# A. HOW HAVE STATES ORGANIZED TO SUPPORT STW DEVELOPMENT?

The STWOA gives states influence in stimulating and shaping STW system development. Key education and workforce development agencies, as well as representatives from other state-level groups, are expected to work collaboratively to create a statewide infrastructure for STW implementation. This infrastructure could include state-level policies relevant to STW systems, an administrative structure, and outreach and support activities to help build local capacity for STW reforms.

The breadth of the state infrastructure may be influenced, in part, by the duration and level of STWOA funding states receive. The STWOA offers states grants for up to five years to help organize their efforts and support the creation of STW partnerships at the substate level. In keeping with the legislation's "venture capital" objective, state grants are modest in the context of overall education spending and other federal education investments. For example, the 37 states awarded STWOA implementation grants between June 1994 and June 1998 received an average of about \$7 million each year. In contrast, in fiscal year 1996, those same 37 states received an average of \$126 million in federal funding under Title I of the Elementary and Secondary Education Act to help low-achieving students, and overall education expenditures amounted to an average of about \$6 billion

per state (Table II.1).<sup>1</sup> The short-term, modest nature of STWOA funding levels, already declining in many states by 1998, underscores the congressional intent that the grants be only partial support for states' STW agendas.<sup>2</sup> In fact, the legislation encourages state leaders to align STW implementation with other related education and workforce development initiatives and funding streams.

States have established governance and administrative structures to oversee distribution of this funding, coordination with other initiatives, and overall STW planning and policy making. Congress mandated the creation of broad partnerships at the state level but did not specify which agency should administer STWOA funds. Instead, the legislation gives governors discretion to define a state STW governing body, choose a STW fiscal agent, and create a team with administrative responsibilities for supporting STW development. Four aspects of state-level organization appear likely to influence the pace, direction, and longevity of STW implementation:

- Effectiveness and usefulness of state STW governance committees
- Choice of an agency to oversee STW administration
- Roles state agencies play in STW development
- Linkages between state education policies and STW implementation

This evaluation is somewhat limited, by its design, in its ability to fully capture the diversity of state STW infrastructure and state-level implementation approaches. The primary focus of the

<sup>&</sup>lt;sup>1</sup>States must distribute an increasing share of STWOA grant funds to local partnerships over the first three years of their grant: at least 70 percent, 80 percent, and 90 percent. A minimum of 90 percent of the fourth- and fifth-year grants must also go to local partnerships.

<sup>&</sup>lt;sup>2</sup>State grants are distributed on an annual basis, with amounts rising for the first two years and declining for the remaining three years.

TABLE II.1

ANNUAL STWOA GRANTS, FEDERAL TITLE I FUNDING, AND TOTAL EDUCATION SPENDING IN GRANTEE STATES
(in Dollars)

State	STWOA Grant Average Annual FY 1994-1998	Federal Title I Grant FY 1996	Total Education Spending FY 1996
Alaska	1,950,000	22,498,000	1,051,296,000
Arizona	5,400,000	87,262,000	3,331,835,000
California	32,850,000	691,965,000	27,521,544,000
Colorado	6,000,000	57,264,000	3,315,190,000
Connecticut	4,950,000	45,962,000	4,321,000,000
Florida	13,650,000	252,802,000	11,469,259,000
Hawaii	2,550,000	16,056,000	960,400,000
Idaho	2,925,000	22,888,000	1,042,161,000
Indiana	7,950,000	92,514,000	5,559,000,000
Iowa	5,625,000	42,509,000	2,743,145,000
Kentucky	5,500,000	109,184,000	3,460,737,000
Louisiana	6,450,000	156,947,000	3,461,971,000
Maine	2,750,000	24,459,000	1,271,792,000
Maryland	6,300,000	72,257,000	4,926,216,000
Massachusetts	7,562,500	103,185,000	6,522,008,000
Michigan	11,000,000	261,032,000	10,735,664,000
Minnesota	5,700,000	69,899,000	4,857,100,000
Missouri	6,900,000	98,868,000	4,172,801,000
Nebraska	3,750,000	28,478,000	1,658,725,000
Nevada	2,850,000	15,994,000	1,286,767,000
New Hampshire	3,187,500	13,604,000	1,184,025,000
New Jersey	8,250,000	118,721,000	11,548,068,000

TABLE II.1 (continued)

State	STWOA Grant Average Annual FY 1994-1998	Federal Title I Grant FY 1996	Total Education Spending FY 1996
New Mexico	3,300,000	49,780,000	1,823,809,000
New York	13,750,000	515,108,000	23,748,287,000
North Carolina	7,500,000	111,143,000	5,845,439,000
Ohio	13,500,000	247,970,000	10,396,689,000
Oklahoma	4,800,000	69,293,000	2,951,191,000
Oregon	4,125,000	66,750,000	3,028,000,000
Pennsylvania	9,750,000	258,813,000	12,300,000,000
Rhode Island	2,850,000	17,931,000	1,071,151,000
Tennessee	7,050,000	100,063,000	4,264,551,000
Texas	15,388,500	515,462,000	19,658,698,000
Utah	3,600,000	28,066,000	1,739,255,000
Vermont	2,625,000	13,469,000	706,280,000
Washington	6,450,000	94,508,000	5,613,481,000
West Virginia	3,450,000	57,100,000	1,763,439,000
Wisconsin	6,187,500	101,937,000	5,435,968,000
Overall Total	258,376,000	4,651,741,000	216,746,942,000
Average	6,983,135	125,722,730	5,858,025,459

SOURCE: National School-to-Work Office and National Center for Education Statistics.

evaluation is on local STW implementation. However, some information has been gathered about the nature of state roles and efforts in developing STW systems and the challenges grantee states have already faced in moving these efforts forward. This information and the analysis of it are based primarily on eight states; however, they raise issues likely to be of broader concern to all states.

#### 1. Interagency STW Governance Was Important Initially, but Its Role Is Diminishing

States have generally created structures for STW development that serve three purposes. First, collaboration among key state agencies and groups is achieved most often through the establishment of governance committees and boards. Second, ongoing support and technical assistance to local communities are provided primarily by a state STW administrative team, often housed in a particular agency. Finally, leadership for STW system building can be taken on by the board (or individual members), the STW administrative team, or both.

Agency collaboration has been an important first step for most states in their STW planning and implementation. Bringing together high-level representatives from state departments responsible for education, workforce development, and economic development was necessary early in the process to build broad support and develop a vision for STW initiatives. Key agencies, for example, were often asked to commit resources, adopt policies to support STW development, or promote STW concepts to their constituencies. Decisions had to be made about how particular elements of STW systems would be designed and affect students. In addition, federal approval of applications for state STWOA implementation grants required demonstration of active and shared support for STW from relevant state agencies, as specified in the legislation. Most states formalized this high-level interagency collaboration by establishing a STW advisory council or other governing board to oversee STW system development.

Over time, however, the momentum of these formal governance arrangements in some states has diminished. In some of the eight in-depth study states, by the third year of their STWOA funding, the originally convened state-level STW governing bodies have disbanded or meet too infrequently to provide ongoing input into STW policy or guidance. Other states have officially placed interagency STW oversight under the state Human Resources Investment Council or state workforce development boards. In these circumstances, STW is one of several state initiatives that must be discussed and compete for the board's attention and resources.

The decreasing vitality and distinctiveness of STW governance and policy structures may not adversely affect STW progress, however. In some states, the decline in high-level collaboration reflects a similar decline in state leadership and attention to STW system building. In other states, individual state agencies continue energetically to carry out pieces of a STW agenda, even without a highly visible governance structure. Across the eight in-depth study states overall, some ongoing STW state support and guidance is occurring, but it does not seem to depend on the extent of high-level agency collaboration and decision making. Instead, most states rely on a STW office and line staff to handle the day-to-day aspects of STW development. Moreover, if certain STW priorities become institutionalized in education and workforce development initiatives and practices, governance structures dedicated to STW systems may be less necessary. At this point, it is still early to judge how the diminishing role of STW interagency governance will affect the future progress of STW reforms.

# 2. Choice of State Administrative Leadership Can Affect Perceptions and Emphasis of STW

Governors choose an administrative vehicle to oversee the development of STW systems. State inter-agency collaboration and STW governing bodies are expected to include diverse members. However, an administrative entity must be responsible for the day-to-day activities of funding and

communicating with local partnerships and coordinating the work of agencies and other state-level groups. Governors have exercised strong influence over the course of STW implementation, in part by deciding where to place the STW office. Their decisions, as illustrated by those made in the eight in-depth study states, have affected STW initiatives in three ways:

- Greater resources are available when STW is in existing agency. Placing administration and leadership in an existing state agency seems to be most effective in leveraging expertise and garnering administrative resources on behalf of STW systems. When the STW office is part of a larger department (as in most of the in-depth study states), it is able to draw on the department's personnel and materials and to have the steady support of that agency's leaders. On the other hand, establishing an independent STW office--usually in the governor's office--avoids favoring a particular agency and underscores the priority of STW. However, independence can leave the office without the clout and administrative resources to effect change in procedures or policies within the relevant executive agencies. In part, these challenges led Massachusetts to move its originally independent STW office into the state Department of Education.
- Agency home for STW indicates implementation emphasis. The type of agency-education or workforce development--that houses STW and its primary staff gives some indication of the state's relative emphasis on expanding workplace activities or on developing school-based components such as career majors, academic-vocational integration, or career guidance. All states address aspects of both school- and work-based activities and involve cross-agency collaboration. However, states with STW administrative leadership in the education department (for example, Florida, Maryland, and Oregon) appear to focus more heavily than other states on school-based changes, in part by emphasizing professional development for teachers and counselors on curriculum and assessment. In contrast, states in which the workforce development agency has more day-to-day responsibility for STW (Michigan and Wisconsin) have focused more on youth apprenticeship and other work-based opportunities.
- Public attitudes toward STW may be affected. Placement of administrative responsibility in a particular agency or unit within an agency can also influence public perceptions toward STW implementation. Where direction and guidance come from state workforce development or labor departments, for example, teachers sometimes view STW development as distinct from education reform priorities. Moreover, those agencies' association with initiatives targeted to disadvantaged youth, such as the Job Training Partnership Act (JTPA), can undermine the message that STW is appropriate for a wide group of students. Similarly, STW leadership under the auspices of the vocational education division has, in some states, led to some stigma and a lack of support from academic teachers for the broader concept of STW reforms.

### 3. State STW Teams Play Supportive, Rather than Prescriptive, Roles

The STWOA gives states broad latitude in defining their vision of STW systems and the role they play in guiding local efforts. The legislation specifies key components that all STW programs and initiatives are expected to include, and states have passed along these definitions to local partnerships. In general, however, state teams are promoting local STW development but are not prescribing any particular STW implementation approach. Instead, state agency STW teams have taken on three supportive functions: (1) providing funding and technical assistance to local partnerships (sometimes using these to guide implementation in particular directions), (2) providing professional development opportunities and tools to aid implementation, and (3) conducting state-level outreach to encourage the participation of key groups in STW implementation.

Guidelines for local implementation are usually flexible, although state priorities often get targeted funding. All states use the federal legislation's definition of "School-to-Work Opportunities Basic Program Components" (STWOA Title I) as a starting point for guiding local implementation. Most require local partnerships to report on implementation progress according to these program elements. Among the eight in-depth study states, some have identified a preferred way for combining program elements (for example, in a youth apprenticeship model) or defined some components more specifically than others (for example, by disseminating a comprehensive, detailed career development program).

However, the eight-state in-depth study suggests that most states do not (and perhaps cannot) insist on strict local compliance with state implementation guidelines. State teams generally understand that many partnerships need to take an incremental approach to implementing the key features included in the state guidelines. In some states, local school control makes it difficult for state agencies to prescribe a specific model for local STW implementation. In Kentucky, for

example, state requirements for local partnership funding included a set minimum number of work-based learning hours for students at various educational levels. These requirements were ultimately treated more as goals than as preconditions for funding, however, so not all partnerships have responded to them. Still, partnerships understood that work-based learning is important in the state's vision of a STW system.

To reinforce state priorities, states have used special funding for certain purposes. States make discretionary grants available, out of STWOA funds and other sources, to focus STW implementation in particular directions. In Michigan, for example, state-funded tax credits for youth apprenticeships and dissemination of policies to promote that model help advance this component of the Michigan STW system. Wisconsin offers wage subsidies to employers who provide students with youth apprenticeship work-based learning. In Ohio, broadening the scope of vocational programs is one of the state's priorities; the Department of Education has provided funding for districts to develop programs of study that span several related career areas. Maryland created a state-level "employer incentive" fund to attract employer interest and involvement.

State STW teams focus on providing assistance and support for local implementation.

Instead of prescribing program details, most states emphasize helping local partnerships understand STW concepts and develop and carry out their plans for STW systems. State efforts to support STW implementation focus on the following areas:

- *Technical Assistance*. Most states provide formal and informal technical assistance through on-site visits, telephone conversations, and E-mail exchanges. State STW team staff provide advice on such topics as how to structure local training and which consultants are appropriate, how to get resource materials, and where to apply for additional sources of funding for STW development.
- Professional Development. Almost every state runs statewide conferences or workshops for STW partnerships. These conferences provide a forum for professional development and opportunities for local coordinators, faculty, counselors,

administrators, and employers to exchange ideas and information on practices or curricula they have found useful. Emphasis on this role varies across states; some give primary responsibility for organizing workshops to individual local partnerships. The Florida STW team, however, also devotes 40 percent of its share of state STWOA grant funds to pre-service and in-service training professional development for teachers.

Curriculum Tools and "How-To" Guides. State agencies have developed materials and
resources for use at the local level. These tools vary in complexity from handbooks on
work-based learning or tips for recruiting employers (common in most states) to a
computer-based system implemented in Florida that helps teachers develop applied
academic curriculum units.

States have made special efforts to increase the participation of employers and postsecondary institutions. Some state agencies have taken steps, in ways they hope will benefit STW system building, to overcome the challenges of involving the private sector, and some are searching for ways to get colleges more involved in education reforms. In the eight in-depth study states, these two groups are viewed as critical to the success of STW development, but their participation is not yet at the levels states ultimately intend. Most of the states conduct promotional activities or have established initiatives to garner greater support and involvement among these key partners. In some cases, these activities are designed specifically for STW purposes; in others, state agency efforts have broader objectives, but are consistent with STW implementation goals.

- Employers. States have used different strategies to encourage private-sector involvement with students and schools, including (1) special promotion or recognition activities for participating firms; (2) promoting STW to employer groups (such as those convened by industry to collaborate on industry-specific workforce development issues); and (3) financial incentives for employer participation, including tax credits or special grant programs. In most of the eight in-depth study states, these efforts have not yet significantly increased the extent of employer participation. Employer use of incentive programs, for example, remains modest.
- Postsecondary Institutions. States are increasingly recognizing the importance of longterm changes in postsecondary institutions, some of which relate directly to STW objectives. STW proponents have often viewed the admissions procedures of four-year institutions as barriers at the high school level to continuation of such STW reforms as applied academics, work-based learning, and authentic assessment of student

performance through active demonstration of skills. Changing postsecondary teacher preparation programs, which continue to emphasize more traditional instructional approaches, is of primary concern to local partnerships because they expend considerable resources to retrain teachers in applied approaches. Some states have formed working groups of key agency and postsecondary institution staff to work on these issues, but this dialogue is just beginning.

#### 4. State Education Policies Have Mixed Consequences for STW

If STW systems are to provide an infrastructure for the education of students, there should be cohesive links between STW efforts and school reform. If the career development opportunities, changes in approaches to teaching and learning, and workplace activities that the STWOA calls for are to become truly available to all students, STW development must fit in with state education requirements and frameworks and the local response to them. The main objective of these requirements generally is improvement in academic curriculum and student performance.

With state education reforms well under way in most parts of the country, state STW leaders face the challenge of linking STW to these mainstream concerns of school administrators and teachers. In many states, legislation and mandates for school change preceded the passage of the STWOA and did not anticipate or include core STW components. Oregon and Kentucky may be exceptions; in those states, school reform included from the start some of the central features promoted by the STWOA. In most states, including Oregon and Kentucky, implementation of education reforms is still unfolding. This presents an opportunity to integrate STW components into school practice but requires special effort to ensure that STW and education reform priorities do not diverge or appear to conflict.

So far, state education policies have had mixed consequences for STW development. Many state STW teams promote particular STW activities as a way to help students meet the new academic standards and graduation requirements that are a centerpiece of state education reforms. Despite this

connection in goals, however, the two efforts are proceeding independently. Some state education policies or mandates appear likely to affect STW implementation progress:

- State career development programs or requirements support a key STW component.
  Career development is an important element of STW systems. Many states, as part of their education reforms, have mandated career development activity for students or strongly encouraged it through state policy. For example, among the in-depth study states, Florida, Kentucky, Maryland, Ohio, Oregon, and Wisconsin have prepared comprehensive career development models that outline activities appropriate for students at the elementary, middle, and high school levels.
- Curriculum frameworks and accountability systems are sometimes seen as inconsistent with STW priorities. A few states have tried to incorporate STW approaches within curriculum frameworks and testing practices. Kentucky's original state student assessment, for example, included a review of portfolios that could contain materials from career development projects or other demonstrations of competencies. Florida has plans to incorporate real "world-of-work" scenarios into the problem-solving exercises that are a component of its state proficiency test. Across the states, however, teachers face the pressures of higher academic standards and high-stakes proficiency tests to assess student achievement. Teachers have often been understandably reluctant to let students out of class for internships, use class time for career development units, or adopt project-based teaching strategies that sometimes reduce time available for conventional instruction geared more directly to academic standards.
- State education reporting requirements are likely to include STW components in only a few states. The elements included in a state's data reporting requirements reflect the state's priorities, and districts respond to them. Recognizing this fact, the national School-to-Work office has sponsored conferences for state STW leaders to discuss strategies for changing state education management information systems. Although many states have indicated they will include STW indicators in their student reporting formats, it remains uncertain whether they will do so. So far, only two of the eight indepth study states (Florida and Oregon) have taken concrete steps to make work-based learning activity or selection of a career major a routine part of districts' reporting requirements.

#### B. WHAT ARE THE FEATURES OF THE LOCAL STW INFRASTRUCTURE?

The most visible product of states' STW implementation efforts is the widespread creation of local STW partnerships. The STWOA called for establishing local partnerships throughout each state, so that all communities could implement the educational changes the legislation proposed.

State STW teams responded, making the formation and funding of local partnerships an early priority. How partnerships are defined and created is left to state and local discretion, but these local collaborations were clearly intended to be more than just conduits for federal funds to schools and other members. According to the STWOA, they were to be "responsible for STW programs" and for stimulating STW reforms.

Local STW partnerships in the 34 grantee states that have participated in the partnership survey can be described with respect to seven issues that have bearing on their potential durability and future roles:

- Breadth of partnership structures
- Strategies for defining partnerships and how they affect some partnership characteristics
- · Composition and leadership of partnerships
- · Extent of employer involvement
- · Role played by postsecondary institutions
- Partnership functions
- · Magnitude of funding made available to local partnerships

# 1. The System of Local Partnerships Is Widespread and Still Growing

Although federal STW legislation acknowledged that communities would develop STW systems in their own way, it clearly expected states to include substantial portions of their towns and cities in the substate partnerships they fund with STWOA grants. Under the STWOA, state plans were required to describe a strategy for expanding partnerships over time to cover all geographic areas: urban, rural, and suburban. This requirement underscored the federal commitment to ensure that

STW development would include a broad range of communities, families, and students. State STW teams have responded by creating a widespread infrastructure that is still growing.

Local partnerships are widespread in most states. By fall 1997, the 34 grantee states surveyed so far in the evaluation had formed 1,106 local partnerships that, overall, included more than 83 percent of secondary school districts in those states.<sup>3</sup> These STW partnership districts accounted for more than 90 percent of all students of high school age in the grantee states.<sup>4</sup> Thus, most students in grantee states already have at least the potential to be involved in STW activities under the auspices of STW partnerships and their member schools. Partnership coverage varies across states, however, in part because states in fall 1997 were still in different stages of creating partnerships (Figure II.1).

Overall: 83 Percent

☑ 75% - 90% □ Less than 75% □ Non-Grantee State

FIGURE II.1
PERCENTAGE OF DISTRICTS INCLUDED IN 1997
SCHOOL-TO-WORK PARTNERSHIPS, BY STATE

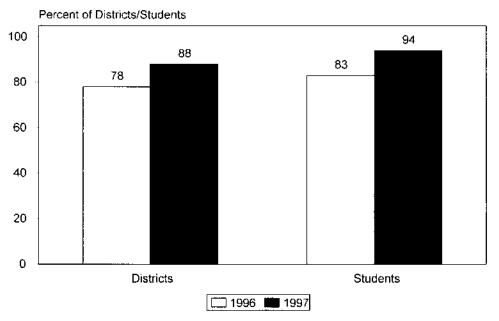
SOURCE: STW local partnership survey, fall 1997, Mathematica Policy Research, Inc.

<sup>&</sup>lt;sup>3</sup>Another 45 partnerships had been established in states that had not yet received STWOA implementation grants.

<sup>&</sup>lt;sup>4</sup>These estimates of overall partnership coverage include an estimate of the coverage of partnerships that did not respond to the surveys, based on the number of districts and students in the partnerships that did respond (87 percent in 1997).

Partnership coverage is still expanding. States do not create partnerships all at once. For example, in the 27 states that had implementation grants by 1996, partnership coverage continued to grow between 1996 and 1997 (Figure II.2). This expansion reflects an increase in the number of partnerships awarded substate grants and the addition of new districts to existing partnerships. Similar growth is likely for the 10 states that first received STWOA funds in 1997. In the 7 newly funded states among these 10 that participated in the 1997 partnership survey, partnerships overall included only 54 percent of their states' school districts that year; however, several of the states have funded new partnerships since then. Missouri, for example, has reported creation of an additional 37 partnerships since 1997. Partnerships are also forming in the six states awarded STWOA implementation grants since fall 1997.

FIGURE II.2
PERCENTAGE OF SCHOOL DISTRICTS AND STUDENTS INCLUDED IN
STW PARTNERSHIPS THAT RESPONDED IN BOTH 1996 AND 1997



SOURCE: STW local partnership survey, fall 1996 and fall 1997, Mathematica Policy Research, Inc.

This measure of local partnerships' district coverage, however, provides little indication of the depth of STW implementation. School districts are involved in STW efforts to different degrees, and the number of students participating in STW activities varies from school to school. The extent to which partnerships are making STW activities available and students are participating in them is discussed in Chapter III.

## 2. How Partnerships Were Formed Is Likely to Affect Prospects for Ongoing Collaboration

The STWOA gave considerable discretion to states in establishing local partnerships. The legislation defined partnerships as entities "responsible for local School-to-Work Opportunities programs" and identified the key groups that should be included. However, the manner in which partnerships were formed, and the extent of cooperation and coordination among the members, were left largely to states and local communities to determine. Some states were prescriptive, identifying the geographic areas and communities that would be joined together in STW partnerships. For example, Maryland specified that JTPA service delivery areas would define the boundaries of STW partnerships throughout the state. In others, such as Wisconsin, partnerships were encouraged to form themselves in whatever way would best reflect local needs and the local labor market and ensure the organizational and financial capacity to develop STW components. As a result, partnerships vary in three dimensions that appear to influence the degree of collaboration among members:

• Partnership Size. The size of local partnerships reflects state decisions about the best scale of local STW collaboration. On average, local partnerships include just a few secondary schools in some states (Hawaii, Iowa, and New Hampshire), but more than 20 in states like Indiana, Louisiana, and Michigan (Table II.2). The larger the partnership, the harder it is to develop partnershipwide working relationships among members and the less likely individual communities are to view themselves as involved in a common enterprise. On the other hand, large partnerships can take advantage of

TABLE II.2

SCALE OF 1997 LOCAL STW PARTNERSHIPS, BY STATE

State         in State         Schools         Students           Alaska         28         4.2         1,152           Arizona         16         15.9         11,507           Colorado         63         4.0         3,420           Connecticut         8         21.4         21,582           Florida         28         14.8         19,510           Hawaii         25         1.3         1,498           Idaho         14         6.7         2,823           Indiana         15         27.9         19,333           Iowa         130         2.6         1,009           Kentucky         22         15.4         8,511           Louisiana         9         38.1         22,871           Maine         21         5.8         1,533           Maryland         12         15.3         17,062           Massachusetts         40         8.2         5,973           Michigan         28         23.7         16,386           Missouri         20         6.8         3,221           Nebraska         20         13.4         4,362           Nevada         4         1			Average Number Per Partnership		
Arizona 16 15.9 11,507 Colorado 63 4.0 3,420 Connecticut 8 21.4 21,582 Florida 28 14.8 19,510 Hawaii 25 1.3 1,498 Idaho 14 6.7 2,823 Indiana 15 27.9 19,333 Iowa 130 2.6 1,009 Kentucky 22 15.4 8,511 Louisiana 9 38.1 22,871 Maine 21 5.8 1,533 Maryland 12 15.3 17,062 Massachusetts 40 8.2 5,973 Michigan 28 23.7 16,386 Missouri 20 6.8 3,221 Nebraska 20 13.4 4,362 Nevada 4 11.7 7,987 New Hampshire 44 2.6 1,373 New Jersey 19 8.8 8,525 New Mexico 21 7.4 3,936	State	-	•	Secondary Students	
Cotorado         63         4.0         3,420           Connecticut         8         21.4         21,582           Florida         28         14.8         19,510           Hawaii         25         1.3         1,498           Idaho         14         6.7         2,823           Indiana         15         27.9         19,333           Iowa         130         2.6         1,009           Kentucky         22         15.4         8,511           Louisiana         9         38.1         22,871           Maine         21         5.8         1,533           Maryland         12         15.3         17,062           Massachusetts         40         8.2         5,973           Michigan         28         23.7         16,386           Missouri         20         6.8         3,221           Nevada         4         11.7         7,987           New Hampshire         44         2.6         1,373           New Jersey         19         8.8         8,525           New Mexico         21         7.4         3,936	Alaska	28	4.2	1,152	
Connecticut         8         21.4         21,582           Florida         28         14.8         19,510           Hawaii         25         1.3         1,498           Idaho         14         6.7         2,823           Indiana         15         27.9         19,333           Iowa         130         2.6         1,009           Kentucky         22         15.4         8,511           Louisiana         9         38.1         22,871           Maine         21         5.8         1,533           Maryland         12         15.3         17,062           Massachusetts         40         8.2         5,973           Michigan         28         23.7         16,386           Missouri         20         6.8         3,221           Nebraska         20         13.4         4,362           Nevada         4         11.7         7,987           New Hampshire         44         2.6         1,373           New Jersey         19         8.8         8,525           New Mexico         21         7.4         3,936	Arizona	16	15.9	11,507	
Florida 28 14.8 19,510 Hawaii 25 1.3 1,498 Idaho 14 6.7 2,823 Indiana 15 27.9 19,333 Iowa 130 2.6 1,009 Kentucky 22 15.4 8,511 Louisiana 9 38.1 22,871 Maine 21 5.8 1,533 Maryland 12 15.3 17,062 Massachusetts 40 8.2 5,973 Michigan 28 23.7 16,386 Missouri 20 6.8 3,221 Nebraska 20 13.4 4,362 Nevada 4 11.7 7,987 New Hampshire 44 2.6 1,373 New Jersey 19 8.8 8,525 New Mexico 21 7.4 3,936	Colorado	63	4.0	3,420	
Hawaii       25       1.3       1,498         Idaho       14       6.7       2,823         Indiana       15       27.9       19,333         Iowa       130       2.6       1,009         Kentucky       22       15.4       8,511         Louisiana       9       38.1       22,871         Maine       21       5.8       1,533         Maryland       12       15.3       17,062         Massachusetts       40       8.2       5,973         Michigan       28       23.7       16,386         Missouri       20       6.8       3,221         Nebraska       20       13.4       4,362         Nevada       4       11.7       7,987         New Hampshire       44       2.6       1,373         New Jersey       19       8.8       8,525         New Mexico       21       7.4       3,936	Connecticut	8	21.4	21,582	
Idaho       14       6.7       2,823         Indiana       15       27.9       19,333         Iowa       130       2.6       1,009         Kentucky       22       15.4       8,511         Louisiana       9       38.1       22,871         Maine       21       5.8       1,533         Maryland       12       15.3       17,062         Massachusetts       40       8.2       5,973         Michigan       28       23.7       16,386         Missouri       20       6.8       3,221         Nebraska       20       13.4       4,362         Nevada       4       11.7       7,987         New Hampshire       44       2.6       1,373         New Jersey       19       8.8       8,525         New Mexico       21       7.4       3,936	Florida	28	14.8	19,510	
Indiana       15       27.9       19,333         Iowa       130       2.6       1,009         Kentucky       22       15.4       8,511         Louisiana       9       38.1       22,871         Maine       21       5.8       1,533         Maryland       12       15.3       17,062         Massachusetts       40       8.2       5,973         Michigan       28       23.7       16,386         Missouri       20       6.8       3,221         Nebraska       20       13.4       4,362         Nevada       4       11.7       7,987         New Hampshire       44       2.6       1,373         New Jersey       19       8.8       8,525         New Mexico       21       7.4       3,936	Hawaii	25	1.3	1,498	
Iowa       130       2.6       1,009         Kentucky       22       15.4       8,511         Louisiana       9       38.1       22,871         Maine       21       5.8       1,533         Maryland       12       15.3       17,062         Massachusetts       40       8.2       5,973         Michigan       28       23.7       16,386         Missouri       20       6.8       3,221         Nebraska       20       13.4       4,362         Nevada       4       11.7       7,987         New Hampshire       44       2.6       1,373         New Jersey       19       8.8       8,525         New Mexico       21       7.4       3,936	Idaho	14	6.7	2,823	
Kentucky       22       15.4       8,511         Louisiana       9       38.1       22,871         Maine       21       5.8       1,533         Maryland       12       15.3       17,062         Massachusetts       40       8.2       5,973         Michigan       28       23.7       16,386         Missouri       20       6.8       3,221         Nebraska       20       13.4       4,362         Nevada       4       11.7       7,987         New Hampshire       44       2.6       1,373         New Jersey       19       8.8       8,525         New Mexico       21       7.4       3,936	Indiana	15	27.9	19,333	
Louisiana       9       38.1       22,871         Maine       21       5.8       1,533         Maryland       12       15.3       17,062         Massachusetts       40       8.2       5,973         Michigan       28       23.7       16,386         Missouri       20       6.8       3,221         Nebraska       20       13.4       4,362         Nevada       4       11.7       7,987         New Hampshire       44       2.6       1,373         New Jersey       19       8.8       8,525         New Mexico       21       7.4       3,936	Iowa	130	2.6	1,009	
Maine       21       5.8       1,533         Maryland       12       15.3       17,062         Massachusetts       40       8.2       5,973         Michigan       28       23.7       16,386         Missouri       20       6.8       3,221         Nebraska       20       13.4       4,362         Nevada       4       11.7       7,987         New Hampshire       44       2.6       1,373         New Jersey       19       8.8       8,525         New Mexico       21       7.4       3,936	Kentucky	22	15.4	8,511	
Maryland       12       15.3       17,062         Massachusetts       40       8.2       5,973         Michigan       28       23.7       16,386         Missouri       20       6.8       3,221         Nebraska       20       13.4       4,362         Nevada       4       11.7       7,987         New Hampshire       44       2.6       1,373         New Jersey       19       8.8       8,525         New Mexico       21       7.4       3,936	Louisiana	9	38.1	22,871	
Massachusetts       40       8.2       5,973         Michigan       28       23.7       16,386         Missouri       20       6.8       3,221         Nebraska       20       13.4       4,362         Nevada       4       11.7       7,987         New Hampshire       44       2.6       1,373         New Jersey       19       8.8       8,525         New Mexico       21       7.4       3,936	Maine	21	5.8	1,533	
Michigan       28       23.7       16,386         Missouri       20       6.8       3,221         Nebraska       20       13.4       4,362         Nevada       4       11.7       7,987         New Hampshire       44       2.6       1,373         New Jersey       19       8.8       8,525         New Mexico       21       7.4       3,936	Maryland	12	15.3	17,062	
Missouri       20       6.8       3,221         Nebraska       20       13.4       4,362         Nevada       4       11.7       7,987         New Hampshire       44       2.6       1,373         New Jersey       19       8.8       8,525         New Mexico       21       7.4       3,936	Massachusetts	40	8.2	5,973	
Nebraska       20       13.4       4,362         Nevada       4       11.7       7,987         New Hampshire       44       2.6       1,373         New Jersey       19       8.8       8,525         New Mexico       21       7.4       3,936	Michigan	28	23.7	16,386	
Nevada       4       11.7       7,987         New Hampshire       44       2.6       1,373         New Jersey       19       8.8       8,525         New Mexico       21       7.4       3,936	Missouri	20	6.8	3,221	
New Hampshire       44       2.6       1,373         New Jersey       19       8.8       8,525         New Mexico       21       7.4       3,936	Nebraska	20	13.4	4,362	
New Jersey       19       8.8       8,525         New Mexico       21       7.4       3,936	Nevada	4	11.7	7,987	
New Mexico 21 7.4 3,936	New Hampshire	44	2.6	1,373	
	New Jersey	19	8.8	8,525	
New York 55 19.6 14,503	New Mexico	21	7.4	3,936	
	New York	55	19.6	14,503	

TABLE II.2 (continued)

	_	Average Number Per Partnership	
State	Number of Partnerships in State	Secondary Schools	Secondary Students
North Carolina	71	4.3	3,830
Ohio	83	9.6	7,171
Oklahoma	45	12.4	3,869
Oregon	15	16.9	8,517
Pennsylvania	47	12.3	9,014
Rhode Island	6	8.6	7,139
Tennessee	46	5.4	3,098
Utah	10	11.1	10,841
Vermont	14	5.8	1,639
Washington	52	6.6	6,169
West Virginia	43	3.4	1,865
Wisconsin	32	14.4	8,504
All 34 Grantee States	1,106	9.0	6,263

SOURCE: STW local partnership survey, fall 1996, Mathematica Policy Research, Inc., and NCES Common Core Database.

regional collaboration and economies of scale and have more employers, industries, and postsecondary institutions to draw on.

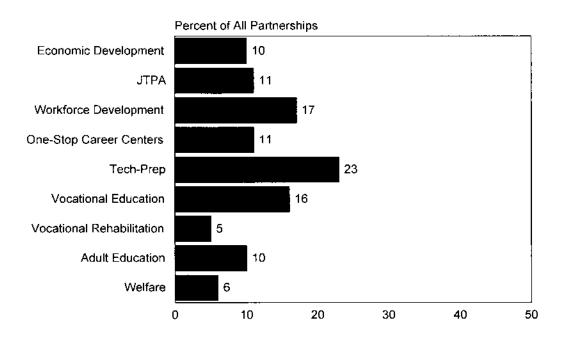
- Geographic Focus. Defining partnerships with clear geographic boundaries, and including all key institutions and organizations in that area, can promote sustained cooperation on a comprehensive STW strategy. Most partnerships have formed in that way. Some states, however, awarded grants for specific projects (for example, developing certain career majors) and allowed schools or districts to be included in multiple grants and align themselves with different partners for subsequent rounds of STW funding. These funding practices can fragment members' efforts. More seriously, such practices can make it difficult to obtain ongoing commitment from district leaders to the concept of a comprehensive STW system, since this type of grant often involves only a few staff from particular departments and does not require active engagement by district administrators in a broad, collaboratively defined agenda. These nongeographically defined partnerships will probably be poorly positioned to lead broad STW implementation efforts or even to endure after federal funding ends.
- Alignment of STW and Other Collaborative Initiatives. To the extent that the
  membership of STW partnerships and their governance structures can be aligned or
  integrated with other related initiatives, lines of communication can be simplified,
  funding sources can be pooled and coordinated, and redundant discussion of common
  issues can be minimized. The national local partnership survey indicates that
  organizational integration has been achieved to some degree in 42 percent of
  partnerships, where STW governing boards also are responsible for other program
  domains. Most often, STW governance is linked to Tech-Prep or workforce
  development (Figure II.3).

# 3. Partnerships Are Broad Collaborations, Usually Led by Educators

The STWOA envisioned local partnerships as a collaboration among a broad array of institutions and organizations. At a minimum, partnerships were to include employers, school districts and postsecondary institutions, organized labor, and students.<sup>5</sup> The possibility of participation by a wide range of other community, industry, government, education and training, and

<sup>&</sup>lt;sup>5</sup>It is unclear whether the congressional expectation was that students would be "members" simply in their role as consumers of STW activities or that representatives of student organizations or student leaders would sit on partnership decision-making bodies. The latter interpretation is not often stressed by partnerships visited for this evaluation.

FIGURE II.3
OTHER PROGRAMS SHARING GOVERNANCE BOARD WITH
SCHOOL-TO-WORK PARTNERSHIPS



SOURCE: STW local partnership survey, fall 1997, Mathematica Policy Research, Inc.

service organizations and agencies was also acknowledged. The strength, effectiveness, and priorities of the partnership, however, are likely to depend on which members it brings together, and who exercises leadership within the partnership.

Educators and employers are well represented, but others are less so. The required core types of STW partners--local education agencies, high schools, postsecondary institutions, and representatives of the business community--are members of nearly every partnership (Table II.3). However, organized labor and students are less often reported as partnership members.<sup>6</sup> Beyond

<sup>&</sup>lt;sup>6</sup>Evaluation case studies identified four reasons for the lower involvement of organized labor: (1) union objections in some states to STW concepts such as "youth apprenticeship"; (2) concerns about possible displacement of mature workers by low-paid students in workplace activities; (3) perceptions among some labor leaders that their active involvement was not really welcome; and (4) the absence, in some locations, of strong and active local unions (see Hershey et al. 1997).

TABLE II.3

PARTNERSHIP COMPOSITION IN FALL 1997

	_	Number o	f Each Entity
Type of Institution/Entity <sup>a</sup>	Percent of Partnerships with Each Entity	Total	Average per Partnership <sup>h</sup>
Education Institutions			
Local Education Agencies/Districts	99.7	6,453	6.5
High schools	99.6	8,184	8.2
Middle schools	86.9	7,101	7.1
Elementary schools	86.9	20,765	20.8
Vocational high schools	23.8	458	0.5
Area/Regional Vocational Districts/Centers	35.2	537	0.5
Intermediate or Regional Educational Service Districts	25.6	339	0.3
Two-Year Postsecondary Institutions	88.4	1,412	1.4
Four-Year Postsecondary Institutions	60.1	1,106	1,1
Alternative Education Providers	72.6	2,524	2.5
Other Educational Institutions	11.4	539	0.5
Training Institutions			
Proprietary Training Institutions	15.4	434	0.4
Registered Apprenticeship Agencies	27.0	529	0.5
JTPA/PIC Agencies	68.4	781	0.8
Other Training Institutions	6.9	211	0.2
Business and Labor			
Private-Sector Firms	83.8	26,807	26.8
Business/Industry or Trade Associations	48.0	3,947	4.0
Chambers of Commerce	80.6	1,844	1.8
Labor Unions	61.2	1,233	1,2
Other Organizations			
Workforce Development Boards	52.9	674	0.7
Local/Regional/State Government Agencies	81.2	3,061	3.6
Community-Based Organizations/Other Nonprofit	62.2	2,708	2.7
Parent/Student Representation	75.7	6,903	6.9
Other	58.7	2,339	2.3

SOURCE: STW local partnership survey, fall 1997, Mathematica Policy Research, Inc.

<sup>&</sup>lt;sup>a</sup>May include some double-counting across partnerships.

<sup>&</sup>lt;sup>b</sup>Average computed across all partnerships responding to the survey.

these parties, explicitly identified in the STWOA, membership of other groups in local partnerships is quite substantial. These groups include community-based or nonprofit organizations and alternative education providers that offer at-risk students and dropouts GED or high school diploma preparation outside traditional schools.

School districts most often play the lead coordinating role. Despite the visible and growing involvement of employers and the varied contributions they make, educators usually lead in making the partnership function. Although about a quarter of all partnership coordinators prefer not to single out a particular member as a leader, those who do generally identify a local or intermediate school district or particular secondary school as most influential in developing and coordinating partnershipwide activities (Figure II.4). School leadership is common even in partnerships where achieving substantial involvement of employers has been a priority.

Percent of All Partnerships 100 80 60 54 40 26 20 8 5 0 School District Postsecondary Employer Other None Named or School Institution or Business Group LEAD ORGANIZATION

FIGURE II.4
LEAD ORGANIZATION IN 1997 PARTNERSHIPS

SOURCE: STW local partnership survey, fall 1997, Mathematica Policy Research, Inc.

Which partner leads partnership activity has both substantive and public relations importance. A strong role for educators in defining priorities and moving initiatives along appears, from the evaluation site visits, to be an important ingredient in keeping students' school program broadly defined and in ensuring an educational agenda for their workplace experiences. The source of leadership can also affect community perceptions of STW initiatives. In some states, parents in small but vocal interest groups have persistently expressed concern that employers' involvement will transform schools into job training units for big business. Site visits and partnership survey data suggest that such concerns are unfounded at this stage, because even partnerships led by employer groups still rely heavily on schools and school districts to set the agenda for STW implementation and initiate the activities to carry it out.

# 4. Employer Involvement Is Widespread and Expanding

Employers are expected to take active roles in STW system building and to work closely with schools. Most partnerships envisioned roles for employers that go beyond creating student workplace learning experiences. These roles include offering input into curriculum, visiting schools, and providing resources and other forms of support to schools to help connect the classroom and the workplace.

Increasing collaboration between employers and schools has been a particularly successful aspect of STW implementation. Although the idea of school-business partnerships did not originate with the STWOA, the legislation has added impetus to efforts to develop more substantive links between educators and employers. Partnerships have emphasized finding ways to involve the business community; many have hired business coordinators to help organize recruitment of employers, connect individual employers with schools, or conduct meetings or training sessions in which employers and educators work together on STW issues. In fact, promoting employer

involvement has been the primary focus of partnership efforts; in the 1997 survey, 67 percent of partnerships gave the highest priority rating to the objective of recruiting employers and 58 percent to the objective of linking school- and work-based learning for students.

By 1997, employers were working with a substantial and growing fraction of American high schools (Table II.4). For example, more than 48 percent of partnership high schools in school year 1996-1997 benefited from the collaboration of employers who provided some form of training or internships for school staff, up from 41 percent the previous year. In more than one-third of partnership schools, employers worked with teachers on curriculum development, a modest but important expansion over school year 1995-1996. There were similar increases for all forms of employer involvement with schools.<sup>7</sup> This expansion is consistent with federal performance goals for STW development and with other reports suggesting that employer engagement in STW partnerships and with schools is widespread (Institute for Research on Higher Education 1997).<sup>8</sup>

### 5. Postsecondary Role in Partnerships Is Limited

The STWOA promotes "linkages between secondary and postsecondary educational institutions" as part of a comprehensive STW strategy. These linkages were expected to go beyond the traditional kinds of interaction between high schools and colleges relating to recruitment and enrollment of high school graduates. Some more extensive institutional connections already existed before passage of the STWOA, and many STW partnerships intended to build on these arrangements. For example,

<sup>&</sup>lt;sup>7</sup>Year-to-year increases in older partnerships--those that had responded to the 1996 partnership survey--were even greater than those presented in Table II.4. Table II.4 includes newer partnerships as well, which had somewhat lower rates of employer involvement. For example, the percentage of schools receiving employer assistance with teacher internships climbed from 41 to 50 percent in partnerships that responded to both the 1996 and 1997 surveys.

<sup>&</sup>lt;sup>8</sup>The national School-to-Work office progress measures also found increases in employer involvement over this period, although they focus more on work-based learning for students and internships for teachers (Medrich et al. 1998).

TABLE II.4
BUSINESS AND INDUSTRY SUPPORT PROVIDED TO SCHOOLS

	Percent of Schools Receiving Support		Employers Providing Support: School Year 1996-1997	
	School Year 1995-1996	School Year 1996-1997	Total Number	Average per School <sup>a</sup>
Working with School Staff				
Curriculum Development	30.7	34.1	20,391	4.5
Promotion/Marketing STW	38.6	45.6	30,791	6.7
Training/Internships for School Staff	40.9	48.2	23,540	5.1
Guest Speaking at Schools	53.2	56.7	59,412	13.0
Providing Material Resources				
Provide Equipment	29.0	32.2	9,744	2.1
Lend Office Space	20.8	22.8	11,433	2.5
Provide Student Awards	30.0	33.6	12,495	2.7
Provide Teacher Stipends	11.3	13.3	2,395	0.5

SOURCE: STW local partnership survey, fall 1996 and fall 1997, Mathematica Policy Research, Inc.

<sup>&</sup>lt;sup>a</sup> Average is computed for those schools that reported receiving support and the number of employers providing the support.

the Tech-Prep Education Act of 1990 encouraged high schools and community colleges to work together to create and expand articulation agreements. These agreements link secondary and postsecondary occupational courses or programs, sometimes granting students college credit or advanced standing for high school courses that are equivalent to portions of the college curriculum.

Partnerships generally include postsecondary institutions, and some interaction takes place between them and their school district partners. On average, 2.5 colleges (including two-year and four-year institutions) are included in local partnerships--a total of almost 1,500 institutions in 1997. They collaborate with schools in a variety of ways (Figure II.5), most commonly by negotiating

Percent of Secondary/Postsecondary Schools 44 [ Share Labor Market Information 42 Share Employer Networks/Contacts 30 Joint Advisory Committees 34 Share Equipment 31 33 Joint Staff Development 32 29 Common Co-Op Education Standards **Dual-Enrollment Agreements** 54 Secondary Course Work Articulated Work-Based Learning Articulated 20 40 60 80 100 ☐Secondary Schools ■Postsecondary Schools

FIGURE II.5 SECONDARY-POSTSECONDARY LINKAGES IN 1997

SOURCE: STW local partnership survey, fall 1997, Mathematica Policy Research, Inc.

articulation of high school and college career programs and dual-enrollment agreements that allow advanced high school students to take college courses if they have exhausted their school's offerings in a particular subject. They also share labor market information and networks of employer contacts and appoint their faculty and administrators to participate together on advisory committees overseeing programs of common interest.

Colleges play a central role in some partnerships. They are the fiscal agents for about 12 percent of local partnerships, and coordinators describe them as the "lead organization" in about 7 percent of partnerships. Particularly where STW partnerships correspond closely in composition to preexisting Tech-Prep consortia formed around a community college, postsecondary partners are willing to participate actively in the work of the partnership.

In general, however, the work of STW partnerships has brought little change to relationships between schools and colleges. None of the linkages and interactions shown in Figure II.5 have grown more common in the two years of partnership surveys. Case study site visits suggest that postsecondary institutions are valued members of STW governing boards but that, in most cases, the nature and intensity of their interactions with schools are not changing significantly as part of STW implementation. Even in the relatively rare cases where community colleges are fiscal agents or lead organizations, they typically play a convening and administrative or coordinating role. It is less common for them, as part of STW implementation, to have increased the interaction between their faculty and that of secondary schools focusing on curriculum or program development or on associated changes at the college level. Cases do exist in which community colleges are closely involved with high schools in defining critical skills and reshaping secondary curricula; these appear to be unusual, however, and are usually the result of initiatives predating the STW partnership.9

<sup>&</sup>lt;sup>9</sup>Earlier studies have found that joint efforts by schools and community colleges on Tech-Prep (continued...)

Involvement of four-year postsecondary institutions in partnerships is more limited than that of community colleges. Whereas community colleges are fiscal agents in 11 percent of partnerships and lead organizations in 6 percent, four-year institutions are fiscal agents and lead organizations in about 1 percent or less. Although four-year colleges and universities are identified as members of partnerships almost as often as community colleges, local school district leaders see them as playing more modest roles. In case study site visits, partnerships often reported that four-year institutions are skeptical that the kinds of curriculum changes STW proponents are promoting will prepare students better for their baccalaureate degree programs.

### 6. Partnerships Play Primarily Capacity-Building Roles

STW partnership entities--the groupings of school districts and colleges, employers, labor and other organizations, and the staff that support their common efforts--were intended to serve a broad purpose, but one left largely to partnerships themselves to determine. The STWOA deemed some level of cooperation and coordination spanning different institutions necessary to plan and implement STW systems. However, the legislation did not stipulate whether this partnership collaboration was to focus solely on matters of policymaking and grant accounting or should also extend into other system-building activities. The STWOA emphasized the importance of coordinating the efforts of partnership members by identifying "connecting activities" as one of three main elements of STW initiatives. However, whether these activities were to be undertaken by the partnership entity or through bilateral relations between individual members was left to the discretion of participating communities.

<sup>&</sup>lt;sup>9</sup>(...continued) articulation agreements have led to little change in college programs and that relatively few students in articulated high school vocational courses have taken advantage of them to enroll in the postsecondary stage of the Tech-Prep program (see Hershey et al. 1998).

Partnerships' roles have generally evolved as efforts to develop the capacity to implement STW reforms among their members. Because of the importance of stimulating activity that will persist beyond federal STWOA funding, many local partnerships have served as agents for change and coordination, rather than attempting to create their own programs providing services or activities directly to students. There are exceptions, however, particularly in small partnerships with a single school district or just a few schools. In these cases, coordinating responsibility is sometimes folded into the existing job of district staff or the school board, with grant funds used to support specific student programs and activities.

In most cases, however, where partnerships span multiple school districts or communities, the entities or staff that represent the partnerships have taken on four roles that could affect the momentum and sustainability of STW development:

- Convening Members and Increasing Awareness of STW. Maintaining cohesion and promoting STW concepts to key constituent groups are important for most STW partnerships. A major function of partnership entities is to bring members together and facilitate communication among them. STW governing boards partially serve this purpose, and some partnerships also arrange other opportunities for members to share information and develop common policies.<sup>10</sup> These meetings help plan ways to increase awareness of STW among employers and the public.
- Promoting Professional Development. Arranging professional development opportunities--for educators and sometimes employer staff--is a major focus of partnership efforts and resources. Partnership leaders usually organize and fund teacher training on topics related to STW reforms, in part because the professional development budgets of individual districts are often limited and needed for other concerns. Partnership staff are often more aware of consultants and trainers who can deliver useful services. Many partnerships have relied on the strategy of providing essentially "free" training to entice districts, schools, teachers, or other members into greater interest and involvement in STW efforts.

<sup>&</sup>lt;sup>16</sup>Ninety percent of partnerships report that they have a governing board. Those that do not tend to be small--only a single district or a few schools. In these communities, partnership functions are often vested in the existing school board or in the role of a district supervisor.

- Recruiting and Supporting Employers. In many partnerships, although districts or schools recruit employer partners for themselves, the partnership entity helps by conducting general outreach to the business community (sometimes by contracting with an organization such as a chamber of commerce). Partnerships commonly develop procedures for recruiting employers or structuring work-based learning that all members can use. In some areas, partnerships coordinate school-employer collaboration for member districts: recruiting businesses, allocating employers to work with individual schools, and maintaining computer systems to help match students with workplace opportunities. Having the partnership perform these functions is intended to minimize competition among schools seeking workplace learning openings from the same employers.
- Allocating Subgrants to Members. Most partnerships pass some of their STWOA grant on as "mini-grants" to smaller units within the overall partnership structure, in part to generate support for the STW agenda. These small awards to individual districts, schools, community-based organizations, or employer groups are often used to engage recipients in some part of the partnership effort. Many partnerships, for example, help cover the cost of a STW liaison in individual schools to ensure that someone is responsible for moving the STW agenda forward. Some governing boards adopt partnershipwide agendas based on collaborative assessment of priorities and implementation gaps and use mini-grants to stimulate efforts that fit into the adopted plan. Sometimes the mini-grants are used to test model or promising practices before they are implemented on a broader scale.

# 7. Partnership Funding Is Suitable for Building System Capacity, Not Running Programs

The STWOA was designed primarily to jump-start the creation of a broad system of initiatives across the United States, rather than to provide ongoing funding for local programs or to help disadvantaged communities. Funds were to be used as "venture capital, to underwrite the initial costs of planning and establishing statewide School-to-Work Opportunities systems . . ." (STWOA Section 3). Grants were to help promote partnership formation, develop implementation experience with STW program components, and instill a "systems approach" to initiatives under

<sup>&</sup>lt;sup>11</sup>After the expiration of this federal "seed money"--a maximum of five years for each state--it was expected that STW initiatives would be sustained by aligning with and drawing on the resources of other education and workforce development efforts.

way. Although a portion of STWOA funding was designated for selected poor communities, the basic goal of the legislation was broad system development.<sup>12</sup>

In general, STWOA funding levels are suited to the collaborative, capacity-building roles partnerships play rather than to ongoing program support. If all substate partnership grants through school year 1997-1998 in the 34 states covered by the 1997 survey had been disbursed entirely to member school districts, the districts would have received an average of \$25,092 per year, or about \$4.32 per elementary and secondary student per year (Table II.5).<sup>13</sup> Some early reports from states suggested that state and local sources were contributing \$2 for every \$1 in federal funding for STW implementation (U.S. Departments of Education and Labor 1996). Even if that pattern holds true, the amount of funding available for STW planning and implementation is still small relative to overall elementary and secondary expenditures per pupil per year--about \$6,500 (Digest of Education Statistics 1997).

The aggregate pattern of states' partnership funding actions makes it clear that STW partnership development is viewed as a general reform rather than as an effort targeted at poor or other types of communities (Table II.5). For example, urban schools do not receive a particular concentration of state funds; although overall substate grants are largest in urban partnerships, the average per-student grant is lowest in urban areas. Partnerships in areas with high poverty rates have received substate funding averaging somewhat less per student than have partnerships with smaller poor populations.

<sup>&</sup>lt;sup>12</sup>The STWOA authorized direct federal grants to urban and rural high-poverty areas and Native American STW partnerships. Together, these categories accounted for about \$117,500,000 in total STWOA funding between 1994 and 1996, or about 19 percent of total STW grants.

<sup>&</sup>lt;sup>13</sup>Per-district and per-student funding levels are higher in school year 1997-1998 than in the previous year (as reported in Silverberg et al. 1998) because most states have given partnerships increasingly larger grants over the first several years of funding.

TABLE II.5

CUMULATIVE FUNDING OF SUBSTATE STW PARTNERSHIPS
THROUGH SCHOOL YEAR 1997-1998

		Average Annualized Grant (in Dollars)		
Partnership Characteristics	Number of Partnerships	Per Student <sup>b</sup>	Per District	
All	867	4.32	25,092	
Metropolitan Status				
Urban	108	2.07	88,576	
Suburban	317	5.46	24,870	
Rural	442	7.58	16,785	
Percent of Population Below Poverty Level				
0 to 5	61	5.80	24,439	
6 to 10	224	6.13	24,543	
11 to 15	295	4.41	20,869	
16 or more	277	3.04	31,820	
Size (Number of High Schools)				
1	150	2.36	51,800	
2 to 5	261	3.35	39,526	
6 to 15	290	5.13	26,657	
15 or more	166	4.85	19,412	

SOURCE: STW local partnership survey, fall 1996 and fall 1997, Mathematica Policy Research, Inc., and NCES Common Core Database.

<sup>&</sup>lt;sup>8</sup> Annualized grant amounts were calculated by summing all STWOA funds received by each partnership up to summer 1998, dividing by the total number of months for which grants were awarded, and multiplying by 12.

<sup>&</sup>lt;sup>b</sup>Annualized grant amount divided by the total number of elementary and secondary students enrolled in partnership districts.

Overall patterns of funding distribution are different, however, if account is taken of the grants awarded directly by the federal government to partnerships in poorer communities. Urban/Rural Opportunities Grants (UROGs) and Native American grants were awarded to ensure that Indian youth and youth in high-poverty areas have access to STW initiatives. These grants are typically more generous (in relation to student population), but also concentrated in a much smaller number of communities, than substate funding. Earlier analyses of total STW funding from 1994 through 1996, including federal direct grants, UROGs, and Native American grants, as well as substate grants, showed an overall pattern that slightly favored poorer communities (Silverberg, Haimson, and Hershey 1998).<sup>14</sup>

### C. HOW DURABLE IS THE STW INFRASTRUCTURE?

The STWOA gave states and local partnerships a central role in developing STW systems. It also gave them some initial funding, but it did not provide long-term financial support. In fact, the legislation did not define the role state teams or local partnerships would play, if any, beyond the five-year period of STWOA seed money funding. One interpretation of congressional intent is that these STW entities need exist only long enough to help schools develop the relevant policies and practices and for communities to form the collaborative bonds among schools, employers, and other key members that the STWOA calls for. After federal funding ends, the groups would be encouraged to work together but without the formal structure of the partnership or the leadership of a state STW team. Alternatively, these entities might become vital to ongoing STW system development, but financial support for them would have to be provided by public and private institutions that believe them to be valuable.

<sup>&</sup>lt;sup>14</sup>More recent data on the amounts granted to UROGs and Native American partnerships, and the periods for which grants were made, are not yet available for analysis.

State and local STW entities have already begun to face diminishing STWOA grant amounts. In school year 1998-1999, 27 states are in their fourth or fifth year of federal STW funding, with grant amounts significantly reduced from earlier years. It is therefore important to examine whether state and local collaborations are likely to continue into the future without the federal funds that have been supporting them. The survival of these entities is likely to depend on two factors:

- State efforts to sustain state teams and local entities through staff commitment, special STW legislation, and funding streams
  - Availability of other resources local partnerships can draw on

This analysis draws primarily on information collected about state and local STW sustainability efforts through site visits in the eight in-depth study states. The information illustrates initiatives that other states and communities could undertake, as well as the kinds of challenges they are likely to face.

# 1. State Plans for Sustaining Original STW Structure Still Emerging, but So Far Limited

With technical assistance from the national School-to-Work office, many states are developing ideas about whether and how to keep state STW offices and teams and local partnerships functioning beyond the federal funding period. At this time, however, actions and concrete commitments for state funding or permanent establishment of local partnership structures are relatively uncommon, at least among the eight in-depth study states, five of which were among the earliest funded by the STWOA. Some states have not decided on the configuration of state STW leadership after federal grants end. Most states have at least one more year of STWOA funding and, therefore, time to develop a plan; several states are allowing partnerships to carry over unspent funds to enable the partnership structures to continue for an additional year. Activities in the eight in-depth study states

so far suggest three consequences for the future of state and local entities beyond the end of federal STW funding: (1) some form of state STW leadership will likely persist, at least for a while; (2) state STW funding to sustain partnership structures will be uncommon; and (3) subsuming partnership entities and functions under workforce development boards, as some states have proposed, will pose significant challenges.

Short-term survival of state STW administrative teams is likely, but on a reduced scale. State STW offices and staff are likely to be sustained at some level, although their long-term future and roles are unclear. The state administrative teams, even those now facing their fourth or final year of STWOA grants, have no immediate plans to disband, but some state offices are beginning to scale back their staff. Maintaining the state team may be easiest where states have avoided funding STW staff out of STWOA grants. Maryland and Florida, for example, have relied primarily on dedicated staff from major state agencies. Other state teams are letting contracts expire for members hired out of grant funds for specific activities (such as promotion and dissemination or statewide employer recruitment). Overall, in most of the eight states, it appears that a core of the original STW team will remain to continue state support activities for at least a year beyond STWOA funding. There are exceptions, however. In one state, administration of STW has already devolved to an agency unit that primarily oversees contracts and grants; little state administrative leadership is left to continue substantive STW momentum after federal funding. Even short-run stability in a few other states is uncertain, particularly where the STW team is not located in a preexisting executive agency.

Securing state funding to sustain existing STW partnerships is likely to be difficult. The STWOA helped strengthen or even create sets of relationships and responsibilities between institutions within and across communities. In multidistrict partnerships, these relationships and

responsibilities have generally been managed by staff who work on behalf of the overall partnership's interests. If these partnership linkages and activities are deemed worth continuing, resources are needed to support the staff and the work they do.

So far, states have had mixed success in committing their own funds to keep STW partnership structures or certain partnership activities going. Most of the in-depth study states have tried; a few have been moderately successful. For example, in 1997, the Massachusetts legislature approved about \$3 million in funding for "Connecting Activities" and seemed poised to approve a similar or larger amount in 1998. However, these funds (available to either STW partnerships or the regional employment boards that oversee them) are intended specifically to support staff who recruit employers and monitor student work-based learning, not for the convening and professional development roles that partnerships have been playing. In Michigan, the governor's new Career Preparation System will provide funding, but it will flow directly to districts, rather than through the existing partnership structures. The state legislature in Kentucky recently authorized funding that can be applied for by STW partnerships, Tech-Prep consortia, or even individual school districts to support particular program activities; this funding thus does not explicitly aim to sustain existing partnerships. In most of the other states, there are no concrete plans yet to provide state funds to support partnership staff or the work they have been doing.

Workforce development boards may not preserve STW partnership structures and relationships. Some states--including several in the in-depth study--have proposed or formed workforce development boards responsible for STW development and other programs. Interest in establishing these boards was stimulated originally by proposed federal legislation in the mid-1990s intended to consolidate a variety of employment and training programs. The legislation proposed that the boards would be made up of representatives from business, education providers, community-

based organizations, and relevant local agencies and would coordinate federal (and, where desired, state) job training funds and programs. Although federal legislation--the Workforce Investment Act--was not passed until August 1998, some states began forming local workforce development boards as early as 1995, out of existing private industry councils responsible for JTPA. Because of these origins, the boards have stronger linkages with adult initiatives and service providers (such as community colleges) than with secondary schools and programs. The roles and emphasis of workforce development boards, and their relationship to STW systems, are still evolving, however.

From state agencies' perspectives, these boards are primarily important for coordinating STW implementation with that of other initiatives, but they are also potentially important as a strategy to help continue the partnership identity and some functions beyond the STWOA funding period. In some states, STW partnership boundaries match or come close to those of the service delivery areas of workforce development boards. However, efforts under way in the in-depth study states suggest that sustaining STW partnership teams or roles under this approach will likely be challenging, for the following reasons:

- Boards are often conceived primarily as conduits for funding. In some states, workforce development boards' primary function will be as arbiter of decisions regarding the allocation of federal and state funds for career-related education, training, and employment initiatives. Although the boards are charged with coordinating activities and funding in their regions, they have no explicit responsibility for maintaining collaborative links or common procedures or policies among area institutions--an important role that STW partnerships have played. Nor do these boards usually have much staff to play those roles.
- States cannot ensure strong links between the boards and current STW partnerships.
   Provisions for creating or passing funds through workforce development boards in some states require the boards to set up committees or councils to advise the board on education issues. However, there is evidence even in the eight in-depth study states that these committees sometimes fail to include the individual or institutional relationships already established as part of STW partnerships.

• STW must compete with other important initiatives for board attention and funding. In states where STW is or will be under workforce development boards with multiple responsibilities, the roles partnerships play and the broad population of students they are expected to serve may be less of a priority than other pressing concerns (such as job training for low-income adults or job placement for welfare recipients). For example, the Workforce Investment Act focuses on services for adults and low-income youth, but it makes no provision for coordination with STW partnerships.

#### 2. Prospects for Sustaining the Partnerships Without Federal or State Funds Are Limited

Some level of funding would be needed to sustain partnership entities, if they provide sufficient "valued added" in the eyes of the partnership members and prospective funding sources. At least so far, STWOA substate or direct federal grants have been the primary source of financial support for the activities multidistrict or regional partnerships undertake: facilitating collaboration and information sharing, providing professional development, and coordinating employer involvement. Because few states now appear to have a viable strategy for maintaining the original partnership structures after the end of STWOA funding, many partnerships would probably have to find other resources to continue operating on even a limited scale.

At this point, it seems likely that many partnerships established under the STWOA will have difficulty obtaining replacement funding. There are two sources of possible support for the partnerships' coordinating and leadership roles: (1) funding for other programs that have similar components and that can support the entity responsible for STW development, and (2) contributions from local partnership members.

Partnership survival is most assured where STW builds on preexisting collaboratives. Without state or federal funding specifically for STW development, some partnerships will be able to rely on funding for other initiatives with similar objectives and implementation strategies. Local or regional jurisdictions relevant to education or workforce development, formed before the STWOA, provided a basis for defining some STW partnerships. Partnerships in some states were

constituted mostly around existing Tech-Prep consortia or community college service areas (Florida), intermediate educational service districts (Michigan), or regional workforce development consortia (Oregon). In these instances, local STW entities were expected to build on established institutional relationships and funding that would give STW a head start and sustain the collaboration beyond the period of federal STWOA grants. Because the preexisting entities have generally had staff who already play roles similar to those in STW partnerships, and they serve essentially the same communities and educational institutions, funding has been pooled and coordinated, and some partnership functions will continue.

Other partnership formation strategies, at least as observed in in-depth study states, are less likely to lead to a durable structure that lasts beyond the federal funding period. For example, institutions and communities in some states were formed into partnerships solely to oversee specific STW projects or programs; the termination of STWOA funding in these situations is more likely to lead to the dissolving of partnership entities. A third category of partnerships exists; these partnerships are geographically defined and established with a staff and responsibility for a broad set of STW-related reforms, but they are not built on existing initiatives. It is uncertain whether these partnership structures will survive after federal STWOA grants cease.

The higher probability of survival for partnerships that are organizationally aligned with other funded collaboratives is good news for many communities involved in STW implementation. The local partnership survey suggests that at least a quarter of partnerships in 1997 may overlap with Tech-Prep consortia. Many of these consortia feature the same kind of collaborative structure, include the same set of members, and perform the same types of functions as do STW partnerships. No precise measures are available for the extent to which STW partnerships coincide with

<sup>&</sup>lt;sup>15</sup>This measure is based on the extent to which STW partnership governing boards also are responsible for overseeing Tech-Prep in their communities.

intermediate educational service districts or other ongoing, funded entities that serve geographically defined areas in the same manner as partnerships (such as education-business alliances or other special education collaboratives). These arrangements may increase the proportion of partnerships that could persist beyond federal STWOA funding to about one-third.

Voluntary financial support from members of local partnerships is rare and uncertain. In some communities where there is no ongoing federal or state support for partnership activities, the value of these activities may be high enough for individual partners to maintain the partnerships with voluntary donations. Many partnerships in the in-depth study states are discussing options for raising funds locally--by establishing an educational foundation, soliciting donations from each participating school district, or asking employers to contribute financially. Some partnerships have even incorporated as 501(c)3 nonprofit institutions to enable them to function independently and accept donations.

At least so far, such efforts at self-sufficiency are uncommon. About 5 out of 40 partnerships in Massachusetts and a few in Oregon, for example, have planned to implement this approach. Moreover, despite professed goals to pursue this course, few partnerships have yet had to test their ability to raise local funds in any substantial amounts. Even in the eight states that were first funded under the STWOA, partnership grants have not ended. Although districts in a few areas observed seem inclined to contribute to partnership continuation, it is unclear how much of a contribution they will make and for how long.